

1125-AB-2272 **Micah B. Milinovich*** (mbmilino@olemiss.edu), Department of Mathematics, Hume Hall,
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problems*. Preliminary report.

Many problems in number theory are related to the question of whether or not there are any \mathbb{Q} -linear relations among the ordinates of the nontrivial zeros of automorphic L -functions. In general, this question is wide open. I will discuss recent progress on some special cases of this question. For instance, are the (non-real) zeros of an L -function simple? Given two L -functions, are their zeros distinct? Can an L -function simultaneously vanish at height t and height $2t$? (Received September 20, 2016)